



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BOARD OF PATENT APPEALS AND INTERFERENCES

In Re Application of:

Ziegler et al.

Serial No.: 10/084,795

Filed: February 25, 2002

For: **SUPPORT GRID SYSTEM**

Examiner: Phi Dieu Tran, A

Art Unit: 3637

Confirmation No.: 7876

Docket No.: 0108

APPEAL BRIEF

Mail Stop Appeal Brief - Patents
Commissioner for Patents
PO Box 1450
Alexandria, Virginia 22313-1450

Sir:

This Brief is submitted in triplicate pursuant to 37 CFR 1.192 in support of the Notice of Appeal filed in the above-identified application. A request for a one-month extension of time is submitted herewith.

REAL PARTY IN INTEREST

The real party in interest in this application is Armstrong World Industries, Inc., the assignee of the present application.

RELATED APPEALS AND INTERFERENCES

There are no other appeals or interferences known to Appellants, or Appellants' legal representatives, which will directly affect, or be directly affected by, or have a bearing on the Board's decision in the pending Appeal.

STATUS OF CLAIMS

Claims 1, 5-9, 16 and 22 are pending in the application, are under rejection and are hereby appealed. Claims 2-4, 10-15 and 17-21 are cancelled.

STATUS OF AMENDMENTS

There were no amendments filed subsequent to final rejection in this application.

SUMMARY OF INVENTION

The invention is a ceiling system having a support member for a ceiling panel. The support member includes a main runner having a vertical web and a bulb portion (page 3, lines 20-21; Figures 1a-1c and 3), a compression strut (page 3, lines 8-9; Figures 1c and 3) and a clip (page 3, lines 8-9; Figures 1b-1c, 2 and 3). The clip has a first leg, a second leg and a mid-portion disposed between the first leg and the second leg (page 3, lines 9-10 and page 4, line 1; Figures 2 and 3). The first leg is in direct contact with and is secured to the vertical web of the main runner (page 3, line 10; Figures 1b, 1c and 3). The second leg is in direct contact with and is secured to the compression strut (page 3, lines 10-11; Figures 1b, 1c and 3). The mid-portion conforms to the bulb portion of a

main runner (page 4, lines 2-3; Figures 1c and 3). The bulb portion interposes the compression strut and the mid-portion of the clip (Figure 3).

ISSUE

Whether or not independent claims 1, 5, 8, 9, 16 and 22 are unpatentable under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 4,545,166 to Kielmeyer.

Whether or not claims 6 and 7 are unpatentable under 35 U.S.C. § 103(a) over U.S. Patent No. 4,545,166 to Kielmeyer.

GROUPING OF CLAIMS

In connection with consideration of the rejection of claims 1, 5-9, 16 and 22, the claims should be grouped together.

ARGUMENT

In the Final Official Action mailed from the U. S. Patent and Trademark Office (PTO) on January 12, 2005, the PTO maintained its rejections of claims 1, 5, 8, 9, 16 and 22 under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 4,545,166 to Kielmeyer and claims 6 and 7 under 35 U.S.C. §103(a) as being unpatentable over Kielmeyer.

By way of background, Kielmeyer describes a ceiling system for commercial buildings which can be height adjusted. The system includes a hat-shaped channel which is suspended from a bar joist, steel purlin or wood joist by a suspension assembly. A C-

shaped clamp with locking ring, a cylindrical rod and two spring clamps complete the suspension assembly.

On page 2 of the Final Official Action of January 12, 2005 (“the Final Official Action”), the PTO asserts that

Kiellmeyer shows a ceiling system having . . . a plurality of compression struts (51) attached to the grid, . . . a plurality of clips (parts 39, 32, 30, 28, 24, 25 together forming a clip), each clip having a first leg (25), a second leg (39), a midportion (24, 29) disposed between the first and second leg, each first leg is in direct contact with and is secured to the vertical web of the main runner, each second leg is in direct contact with and is secured to the compression runner and each midportion conforms to the bulb portion of a main runner, the bulb portion being interposed between the compression strut and the mid-portion, . . .

(Emphasis Added).

As stated by the Appellants in their Reply of October 29, 2004 (“the Reply”), to the non-final Office Action of August 2, 2004, a key feature of the invention is the “compression strut”. In the Final Official Action the Examiner asserts that Appellants recited compression strut, indicated by reference numeral 12, is taught by element 51 of Kiellmeyer. In the Reply, Appellants directed the PTO to column 2, line 66 where Kiellmeyer describes element 51 as a “bar joist”. Appellants further explained that Kiellmeyer’s “bar joist” is the basic support structure of the previous ceiling, and is akin to a construction beam.

In an attempt to educate the Examiner, and to further distinguish Kiellmeyer’s element (51) from the “compression strut” recited in claims 1 and 9, Appellants provided the ordinary meaning of “strut”, as defined in the dictionary to illustrate that there is a

clear structural difference between the “strut” recited in Appellant’s claims 1 and 9 and Kielmeyer’s element (51). As set forth in the Reply, the dictionary definition of a “strut” is any piece of a frame which resists thrust or pressure in the direction of its own length. Appellants attempted to make a point in the Reply that the claimed “compression strut” was akin to this dictionary definition. In contrast to both Appellants’ claimed strut and the dictionary definition, Appellants respectfully reiterate that Kielmeyer offers no description or suggestion that element 51, or any other component of his ceiling system, is a “strut”, in that it provides resistance in the direction of its own length when an upward thrust or pressure, such as wind uplift, is applied. As Kielmeyer’s system does not contain a “strut” as required by independent claims 1 and 9, these claims, and all claims which depend therefrom, should be found allowable.

Additionally, claims 1 and 9 require that “the bulb portion [of the main runner] is interposed between the compression strut and the mid-portion of the clip.” In other words, Appellants’ bulb portion 14 interposes the compression strut 12 and mid-portion 8 of clip 2 as shown in Figure 1c. Interposing the bulb portion of the main runner between the compression strut and mid-portion of the clip provides rotational resistance and stability to the ceiling system when a wind up-lift force is applied thereto.

As indicated above, on page 2 of the Final Official Action, the Examiner states that Kielmeyer’s bulb portion interposes element 51 and the combination of elements 24 and 29.¹ Appellants respectfully disagree. Kielmeyer’s bulb portion (11) clearly does not interpose element 51 and the combination of elements 24 and 29. As this feature is

¹ In the Final Official Action, the Examiner equates the combination of Kielmeyer’s central section (29) and divergent arms (24) to Appellants’ claimed “mid-portion” and Kielmeyer’s central top (11) to Appellants’ bulb portion.

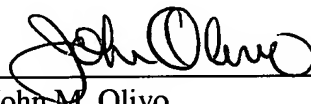
not described, illustrated or suggested by Kielmeyer, claims 1 and 9, and all of the claims that depend therefrom, should be found allowable.

CONCLUSION

As Kielmeyer does not describe or suggest all of the limitations of independent claims 1 and 9, these claims, as well as claims 5-8, 16 and 22 which depend therefrom, are neither anticipated by nor obvious in view of Kielmeyer. Therefore, the rejections under 35 U.S.C. §102(b) and §103(a), should be withdrawn and claims 1, 5-9, 16 and 22 should be found allowable. Appellants request reversal of the rejections and allowance of the application.

Respectfully submitted,

6/20/05
Date



John M. Olivo
Registration No. 51,004
Attorney for Appellants

Armstrong World Industries, Inc.
P.O. Box 3001
Lancaster, PA 17604
(717) 396-2629 (Telephone)
(717) 396-6121 (Facsimile)

APPENDIX

Pending Claims

1. A ceiling system comprising:

a grid formed from a plurality of parallel-extending main runners and a plurality of cross runners extending between the main runners, each main runner having a vertical web and a bulb portion;

a plurality of compression struts;

a plurality of panels resting within the grid; and

a plurality of clips, each clip having a first leg, a second leg and a mid-portion disposed between the first leg and the second leg;

wherein each first leg is in direct contact with and is secured to the vertical web of the main runner, each second leg is in direct contact with and is secured to the compression strut and each mid-portion conforms to the bulb portion of a main runner, the bulb portion being interposed between the compression strut and the mid-portion.

5. The ceiling system of claim 1, wherein the system is capable of meeting an up-lift classification 90.

6. The ceiling system of claim 1, wherein the plurality of compression struts are attached to the plurality of main runners at intervals of about 2 feet.

7. The ceiling system of claim 1, wherein the plurality of compression struts are attached to the plurality of main runners at intervals of up to about 12 feet.

8. The ceiling system of claim 1, wherein the plurality of panels are downwardly accessible.

9. A support member for a ceiling panel comprising
a main runner having a vertical web and a bulb portion;
a compression strut; and
a clip comprising a first leg, a second leg and a mid-portion, wherein the first leg is in direct contact with and is secured to the vertical web of the main runner, the second leg is in direct contact with and is secured to the compression strut, and the mid-portion is disposed between the first leg and second leg and is shaped to conform to the bulb portion of the main runner;

wherein the bulb portion is interposed between the compression strut and the mid-portion of the clip.

16. The support member of claim 9, wherein the support member supports a ceiling system capable of meeting an up-lift classification of at least 90.

22. The ceiling system of claim 1, wherein the first leg is secured to the main runner by a first fastening device selected from the group consisting of chemical and mechanical fastening devices and the second leg is secured to the compression strut by a

second fastening device selected from the group consisting of chemical and mechanical fastening device.